



EV270268633US

PATENTS

Attorney Docket No. KONG-21

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

Examiner : Not Yet Assigned
Group Art Unit : 1615
Applicant : Ling Yuk Cheung
Application No. : 10/717,137 Confirmation No.: 7246
Filed : November 18, 2003
For : METHODS AND COMPOSITIONS FOR TREATING
EPILEPSY

New York, New York 10020
April 23, 2004

Hon. Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97, applicant, through his/her attorneys or agents, makes of record the documents listed below.

U.S. Patent Documents

4,081,367	Hulls et al.	03/28/78
4,183,807	Yoshizawa et al.	01/15/80
4,211,645	Zajic et al.	07/08/80
4,559,305	Zajic et al.	12/17/85
4,816,158	Shimura et al.	03/28/89
5,075,008	Chigusa et al.	12/24/91
5,106,594	Held et al.	04/21/92
5,416,010	Langenberg et al.	05/16/95
5,476,787	Yokoyama et al.	12/19/95
5,567,314	Chigusa et al.	10/22/96
5,578,486	Zhang	11/26/96
5,707,524	Potter	01/13/98
5,879,928	Dale et al.	03/09/99
6,036,854	Potter	03/14/00
6,391,617	Cheung	05/21/02
6,391,618	Cheung	05/21/02
6,391,619	Cheung	05/21/02
6,436,695	Cheung	08/20/02
6,440,713	Cheung	08/27/02
6,649,383	Cheung	11/18/03
6,660,508	Cheung	12/09/03
20020123127 A1	Cheung	09/05/02
20020123129 A1	Cheung	09/05/02

U.S. Patent Documents

20020123130 A1	Cheung	09/05/02
20040001815 A1	Cheung	01/01/04
20040001857 A1	Cheung	01/01/04
20040001857 A1	Cheung	01/01/04
20040001858 A1	Cheung	01/01/04
20040001859 A1	Cheung	01/01/04
20040001860 A1	Cheung	01/01/04
20040001861 A1	Cheung	01/01/04
20040005337 A1	Cheung	01/08/04

Foreign Patent Documents

FR 2222433	France	10/18/74
Abstract of SU 415983A	Russia	11/15/74
EP 0041373	EPO	12/09/81
Abstract of SU 1071637	Russia	020/7/84
Abstract of JP 60028893	Japan	02/14/85
WO 87/02705	PCT	05/07/87
WO 95/04814	PCT	02/16/95
CN 1110317A	China	10/18/95
WO 99/60142	PCT	11/25/99

Foreign Patent Documents

WO 02/20431	PCT	03/14/02
WO 02/62981	PCT	08/15/02
WO 02/62982	PCT	08/15/02
WO 02/62983	PCT	08/15/02
WO 02/62984	PCT	08/15/02
WO 02/62985	PCT	08/15/02
WO 02/070682 A2	PCT	09/12/02

Other Documents

Agarwal N. et al., "Selection of *Saccharomyces cerevisiae* strains for use as a microbial feed additive," Letters in Applied Microbiology, 31:270-273 (2000).

Asami, K. et al., "Real-Time Monitoring of Yeast Cell Division by Dielectric Spectroscopy", Biophysical Journal, 76, pp. 3345-3348 (1999).

Balcer-Kubiczek, E.K. et al., "Expression Analysis of Human HL60 Cells Exposed to 60 Hz Square-or Sine-Wave Magnetic Fields", Radiation Research, 153, pp. 670-678 (2000).

Bassett, C.A.L. et al., "Beneficial Effects of Electromagnetic Fields", Journal of Cellular Biochemistry, 51, pp. 387-393 (1993).

Binninger, D. M. et al., "Effects of 60Hz AC magnetic fields on gene expression following exposure over multiple cell generations using *Saccharomyces cerevisiae*", Bioelectrochemistry and Bioenergetics, 43(1): 83-89 (1997).

Other Documents

Conti, P. et al., "Effect of Electromagnetic Fields on Several CD Markers and Transcription and Expression of CD4", Immunobiology, 201, pp. 36-48 (1999).

Deguchi, T. et al., "Nylon biodegradation by lignin-degrading fungi", Applied and Environmental Microbiology, 63(1): 329-331 (1997).

Dufresne C. et al., "Tea, Kombucha, and Health: A review," Food Research International, 33:409-421 (2000).

Gonzalez, A.M. et al., "Effects of an Electric Field of Sinusoidal Waves on the Amino Acid Biosynthesis by Azotobacter", Z. Naturforsch, 35, pp. 258-261 (1980).

Goodman, E.M. et al., "Effects of Electromagnetic Fields on Molecules and Cells", International Review of Cytology, 158, pp. 279-339 (1995).

Greenwalt C.J. et al., "Kombucha, the fermented tea: Microbiology, composition, and claimed health effects," Journal of Food Protection, 63:976-981 (2000).

Grospietsch, T. et al., "Stimulating Effects of Modulated 150 MHz Electromagnetic Fields on the Growth of Escherichia coli in a Cavity Resonator", Bioelectrochemistry and Bioenergetics, 37, pp. 17-23 (1995).

Grundler W. et al., "Resonant-like dependence at yeast growth rate on microwave frequencies," The British Journal of Cancer, Supplement, England Mar 1982, 45:206-208 (1982).

Grundler, W. et al., "Mechanisms of Electromagnetic Interaction with Cellular Systems", Naturwissenschaften, 79, pp. 551-559 (1992).

Other Documents

Grundler, W. et al., "Nonthermal Effects of Millimeter Microwaves on Yeast Growth", Z. Naturforsch., 33, pp. 15-22 (1978).

Ivaschuk, O.I. et al., "Exposure of Nerve Growth Factor-Treated PC12 Rat Pheochromocytoma Cells to a Modulated Radiofrequency Field at 836.55 MHz: Effects on c-jun and c-fos Expression", Bioelectromagnetics, 18, pp. 223-229 (1997).

Jelínek, F. et al., "Microelectronic Sensors for Measurement of Electromagnetic Fields of Living Cells and Experimental Results", Bioelectrochemistry and Bioenergetics, 48, pp. 261-266 (1999).

Lacy-Hulbert, A. et al., "Biological Responses to Electromagnetic Fields", FASEB Journal, 12, pp. 395-420 (1998).

Libertin, C.R. et al., "Effects of Gamma Rays, Ultraviolet Radiation, Sunlight, Microwaves and Electromagnetic Fields on Gene Expression Mediated by Human Immunodeficiency Virus Promoter", Radiation Research, 140, pp. 91-96 (1994).

Lin, H. et al., "Magnetic Field Activation of Protein-DNA Binding", Journal of Cellular Biochemistry, 70, pp. 297-303 (1998).

Lin, H. et al., "Specific Region of the c-myc Promoter Is Responsive to Electric and Magnetic Fields", Journal of Cellular Biochemistry, 54, pp. 281-288 (1994).

Liu C.H. et al., "The Isolation and identification of microbes from a fermented tea beverage, Haipao, and their interactions during Haipao fermentation," Food Microbiology (London), 13:407-415 (1996).

Other Documents

Loberg, L.I. et al., "Expression of Cancer-Related Genes in Human Cells Exposed to 60 Hz Magnetic Fields", Radiation Research, 153, pp. 679-684 (2000).

Mayser P. et al., "The yeast spectrum of the 'tea fungus Kombucha'," Mycoses, Blackwell, Berlin, Germany, 38:289-295 (1995).

Moore, R.L., "Biological Effects of Magnetic Fields: Studies with Microorganisms", Canadian Journal of Microbiology, 25, pp. 1145-1151 (1979).

Morehouse, C.A. et al., "Exposure of Daudi Cells to Low-Frequency Magnetic Fields Does Not Elevate MYC Steady-State mRNA Levels", Radiation Research, 153, pp. 663-669 (2000).

Norris, V. et al., "Do Bacteria Sing? Sonic Intercellular Communication Between Bacteria May Reflect Electromagnetic Intracellular Communication Involving Coherent Collective Vibrational Modes that Could Integrate Enzyme Activities and Gene Expression", Molecular Microbiology, 24, pp. 879-880 (1997).

Novelli, G. et al., "Study of the Effects on DNA of Electromagnetic Fields Using Clamped Homogeneous Electric Field Gel Electrophoresis", Biomedicine & Pharmacotherapy, 45, pp. 451-454 (1991).

Phillips, J.L., "Effects of Electromagnetic Field Exposure on Gene Transcription", Journal of Cellular Biochemistry, 51, pp. 381-386 (1993).

Pichko, V. B. et al., "Electromagnetic stimulation of productivity of microorganisms and its mechanisms", Prikladnaya Biokhimiya I Mikrobiologiya, 32(4): 468-472 (1996).

Other Documents

Ponne, C. T. et al., "Interaction of electromagnetic energy with biological material-relation to food processing", Radiation Physics and Chemistry, 45(4): 591-607 (1995).

Romano-Spica, V. et al., "Ets1 Oncogene Induction by ELF-Modulated 50 MHz Radiofrequency Electromagnetic Field", Bioelectromagnetics, 21, pp. 8-18 (2000).

Surawicz Christina M. et al., "The search for a better treatment for recurrent Clostridium difficile disease: Use of high-dose vancomycin combined with Saccharomyces boulardii," Clinical Infectious Diseases, 31:1012-1017 (2000).

Trosko, J.E., "Human Health Consequences of Environmentally-Modulated Gene Expression: Potential Roles of ELF-EMF Induced Epigenetic Versus Mutagenic Mechanisms of Disease", Bioelectromagnetics, 21, pp. 402-406 (2000).

Van den Bogaerde J. et al., "Immune sensitization to food, yeast and bacteria in Crohn's disease," Alimentary Pharmacology & Therapeutics, 15:1647-1653 (2001).

Van Rensburg, P. et al., "Engineering yeast for efficient cellulose degradation", Yeast, 14(1): 67-76 (1998).

Ventura, C. et al., "Elf-pulsed Magnetic Fields Modulate Opioid Peptide Gene Expression in Myocardial Cells", Cardiovascular Research, 45, pp. 1054-1064 (2000).

Woodward, A.M. et al., "Genetic Programming as an Analytical Tool for Non-linear Dielectric Spectroscopy", Bioelectrochemistry and Bioenergetics, 48, pp. 389-396 (1999).

Other Documents

Yonetani, T. et al., "Electromagnetic Properties of Hemoproteins", The Journal of Biological Chemistry, 247, pp. 2447-2455 (1972).

Zhang, L. et al., "Electrostimulation of the Dehydrogenase System of Yeast by Alternating Currents", Bioelectrochemistry and Bioenergetics, 28, pp. 341-353 (1992).

"*Saccharomyces cerevisiae* Meyen ex Hansen", China Catalogue of Cultures/China Committee of Culture Collection for Microorganisms (CCCCM), "www.im.ac.cn/database/YEAST/y122.htm", April 24, 1996, retrieved on November 27, 2002.

Concise Explanation of Non-English Publication

Pursuant to 37 C.F.R. § 1.98(a)(3)(i), applicant submits the following concise explanation of the relevance of Chinese Patent Application CN 1110317A. This reference relates to a method of isolating microbes of interest from a natural source. In this method, the source material is mixed with sterile water or a culture medium and then extracted to obtain a solution containing microbes from the natural source. The solution is then placed in a horizontal, non-metallic cylindrical container and exposed to an electric field with specific frequency and field strength. The

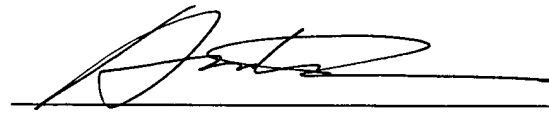
microbe of interest can then be collected from an opening in the middle of the cylindrical container.

This reference is relevant only because it describes the use of electric fields in a microbiological method. This reference, however, does not teach or suggest the claimed invention.

Applicant respectfully requests that the documents listed above be (1) fully considered by the Examiner during the course of examination of this application and (2) printed on any patent issuing from this application. Applicant also requests that the Examiner forward the enclosed duplicate copy of Form PTO-1449, duly acknowledged and initialed by the Examiner, to the undersigned with the next Communication.

This Statement is submitted before the mailing of a first Office action on the merits. In accordance with 37 C.F.R. § 1.97(b)(3), submission of this Statement requires no fee.

Respectfully submitted,



James F. Haley, Jr. (Reg. No. 27,794)
Z. Ying Li (Reg. No. 42,800)
Li Su (Reg. No. 45,141)
Attorneys for Applicant
Haitao Sun (Reg. No. 48,546)
Agent for Applicant
c/o FISH & NEAVE
Customer No. 1473
1251 Avenue of the Americas
New York, New York 10020-1104
Tel.: (212) 596-9000